

Purchase Order Receipt Listing

Monday, April 13, 2015 8:13:17 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO28026 Receipt Dates from 4/13/2015 to 4/13/2015 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID: PO28026 CAD											
	1	No	M303R0.500 303 Round Bar 0.500"	f	4/15/2015 36.0000	4/13/2015 DCUSER	36.0000	\$1.30 \$46.90	0.0000 0.0000	0 0	\$46.90
	2	No	M303R0.625 303 Round Bar 0.625"	f	4/15/2015 12.0000	4/13/2015 DCUSER	12.0000	\$2.57 \$30.79	0.0000 0.0000	0 0	\$30.79
	3	No	M303R0.750 303 Round Bar 0.750"	f	4/15/2015 48.0000	4/13/2015 DCUSER	48.0000	\$2.77 \$133.01	0.0000 0.0000	0 0	\$133.01
	6	No	M304R.500 304 SS roundbar .500"	f	4/15/2015 24.0000	4/13/2015 DCUSER	24.0000	\$1.71 \$41.05	0.0000 0.0000	0 0	\$41.05
	7	No	M304R1.000 304 round bar 1.00"	f	4/15/2015 12.0000	4/13/2015 DCUSER	12.0000	\$4.95 \$59.37	0.0000 0.0000	0 0	\$59.37
	8	No	M304S22GA 304/316 .032 Sheet	sf	4/15/2015 64.0000	4/13/2015 DCUSER	64.0000	\$2.52 \$161.06	0.0000 0.0000	0 0	\$161.06
	9	No	M6061T6B0.375X01.000 6061T6 BAR .375 x 1.00"	f	4/15/2015 12.0000	4/13/2015 DCUSER	12.0000	\$2.30 \$27.63	0.0000 0.0000	0 0	\$27.63
	10	No	M6061T6B0.750X08.000 6061-T6 BAR .750" X 8.00"	f	4/15/2015 8.0000	4/13/2015 DCUSER	8.0000	\$20.72 \$165.80	0.0000 0.0000	0 0	\$165.80

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO28026	11		M6061T6R0.625	f	4/15/2015	4/13/2015	36.0000	\$0.79	0.0000	0	\$28.56
CAD	No		6061-T6 Round Bar .625" m131999	f	36.0000	DCUSER		\$28.56	0.0000	0	
	12		M6061T6R0.750	f	4/15/2015	4/13/2015	48.0000	\$1.13	0.0000	0	\$54.40
	No		6061-T6 Round Bar .750" m131999	f	48.0000	DCUSER		\$54.40	0.0000	0	
	17		M7075T6B3.000x04.000	f	4/15/2015	4/13/2015	4.0000	\$64.39	0.0000	0	\$257.57
	No		7075-T6 BAR 3.000' f X 4.000" Grain along 3" m131999	f	4.0000	DCUSER		\$257.57	0.0000	0	
Total Received Quantity:											304.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$1,006.13
Total Balance Due Quantity:											0.0000

B I L L O F L A D I N G
Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 928193
Ship Date 08Apr15 at 15:26 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC-789587- 1 Your PO # 28026

STAINLESS STEEL ROUND BAR 303 STAINLESS
.50" DIA X 144.0000"

Heat Number Tag No
R4T6 399149

Quantity
36 FT

PCS 3 MTR Wt LBS
24

2) Our Order PEC-789587- 2 Your PO # 28026

STAINLESS STEEL ROUND BAR 303 STAINLESS
.625" DIA X 144.0000"

Heat Number Tag No
T4H5 399150

Quantity
12 FT

PCS 1 MTR Wt LBS
12

3) Our Order PEC-789587- 3 Your PO # 28026

STAINLESS STEEL ROUND BAR 303 STAINLESS
.750" DIA X 144.0000"

Heat Number Tag No
N8R6 399151

Quantity
48 FT

PCS 4 MTR Wt LBS
73

4) Our Order PEC-789587- 4 Your PO # 28026

STAINLESS STEEL ROUND BAR 304L
.50" DIA X 144.0000"

Heat Number Tag No
34643 399152

Quantity
24 FT

PCS 2 MTR Wt LBS
16

5) Our Order PEC-789587- 5 Your PO # 28026

STAINLESS STEEL ROUND BAR 304L
1.00" DIA X 144.0000"

Heat Number Tag No
M8B5 399153

Quantity
12 FT

PCS 1 MTR Wt LBS
33

Page: 1Continued

815-04-10

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

B I L L O F L A D I N G
Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 928193
Ship Date 08Apr15 at 15:26 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

6) Our Order PEC-789587- 6 Your PO # 28026
STAINLESS STEEL SHEET 304-2B

.0300 Nom X 48.0000" X 96.0000"

Heat Number Tag No
A2400918 399346

Quantity PCS
64.00 SFT 2

Wt LBS
80

MTR

7) Our Order PEC-789587- 7 Your PO # 28026
ALUMINUM FLAT BAR 6061-T6511

.375" x 1.00" X 144.0000"

Heat Number Tag No
Z00243056 399154

Quantity PCS
12 FT 1

Wt LBS
6

MTR

8) Our Order PEC-789587- 8 Your PO # 28026
ALUMINUM FLT BAR ECONOPLT 6061-T6511

.750" X 8.00" X 96.0000"

Heat Number Tag No
Z00102083 399319

Quantity PCS
8 FT 1

Wt LBS
57

MTR

9) Our Order PEC-789587- 9 Your PO # 28026
ALUMINUM ROUND BAR 6061-T6511

.625" DIA X 144.0000"

Heat Number Tag No
201424620 399155

Quantity PCS
36 FT 3

Wt LBS
13

MTR

10) Our Order PEC-789587- 10 Your PO # 28026
ALUMINUM ROUND BAR 6061-T6511

.750" DIA X 144.0000"

Heat Number Tag No
40959-204 399156

Quantity PCS
48 FT 4

Wt LBS
25

MTR

11) Our Order PEC-789587- 11 Your PO # 28026
Part # OFF CUT 71.50 LONG
ALUMINUM PLATE 7075-T651

1.250" THICK X 1.0000" X 71.5000"

Rel #

Sp15-a4-13.

Page: 2Continued

ALUMINIUM • LAITON • CUIVRE • PLASTIQUE • ACIER INOX
ALUMINUM • BRASS • COPPER • PLASTICS • STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.
ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY
RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

B I L L O F L A D I N G
Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 928193
Ship Date 08Apr15 at 15:26 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G
OFFERING MATERIAL LENGTH PER QUOTE
B/O

12) Our Order PEC-789587- 12 Your PO # 28026
Part # OFF CUT 53.50 LONG Rel #
ALUMINUM PLATE 7075-T651
1.750" THICK X 2.2500" X 53.5000"
OFFERING MATERIAL LENGTH PER QUOTE
B/O *

13) Our Order PEC-789587- 13 Your PO # 28026
ALUMINUM PLATE 7075-T651
4.00" THICK X 3.0000" X 48.0000"

**** GRAIN DIRECTION ALONG THE 3.00 INCH DIM ****

Heat Number Tag No
1350002250 399907

Quantity
1.00 SFT

PCS
1

Wt LBS
62

TOTAL: Tags 11 PCS 23 LBS 401

Heat Number
1350002250
201424620
34643
40959-204
A2400918
M8B5
N8R6
R4T6
T4H5
Z00102083
Z00243056

*** Chemical Analysis ***

SP15-04-13

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT

Page: 3Continued

ALUMINIUM • LAITON • CUIVRE • PLASTIQUE • ACIER INOX
ALUMINUM • BRASS • COPPER • PLASTICS • STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.
ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY
RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

SHIP FROM:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

SHIP TO: (1)
DART AEROSPACE

NO: PEC 928193
SHIP DATE 08Apr15 at 15:26 From PFW
PROBILL
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

=====

B I L L O F L A D I N G

WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL 1 BDL, 1 SKID, 2 PKGS GW. 479 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

Page: 4 Last

ALUMINIUM • LAITON • CUIVRE • PLASTIQUE • ACIER INOX
ALUMINUM • BRASS • COPPER • PLASTICS • STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

THYSSENKRUPP MATERIALS NA

P.O. Ref 28026

STAINLESS STEEL ROUND BAR 303 STAINLESS
50" DIA X 144.0000"
PART NO.

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: *[Signature]*

Certificate of Mill Test Results
BL PEC-928193-001
8 Apr 15
Pg 1/1



METALLURGICAL TEST REPORT

740 Imperial Road North

Certificate: 38830 1

Customer: 007206 001

Your Order: PEC264194

NAS Order: PN 0048581 03

Ship To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Date: 3/09/2015 Page: 1

Steel: 303

Finish: CD

Corrosion:

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
ASTM A582/12 EN 10204 3.1, ASTM A484/11
AMS 5640 TYPE 1, Q08-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, ZAF+AOD+CC. NO WELD REPAIR, MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BG8049 6		.5000		661	144.00	15	1	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
R4T6	US	.0191	.1285	17.1610	.3630	1.8090	.2615	.0569	8.1775	.0330

S %	SI %
.3360	.4330

MECHANICAL PROPERTIES

Product Id	1 d o i c z	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BG8049 6	R.L	200.0	84.77	107.94	24.84	28.85

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy
of the test methods used, the material meets the specifications stated. These results relate only to the items
tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

[Signature]

THYSSENKRUPP MATERIALS NA

PO/Rel 28026

STAINLESS STEEL ROUND BAR 303 STAINLESS
:750" DIA X 144,000"
PART NO.

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results
BL PEC-928193-003
8Apr15
Pg 1/1



740 Imperial Road North

Certificate: 41230 1

Customer: 007206 001

Your Order: PEC265586

Mail To: THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Ship To: THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Product Description: Round Bar, Annealed, Cold Draw
ASTM A582/12 EN 10204 3.1, ASTM A484/11
AMS 5640V TYPE 1, QOS-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MTN

NAS Order: IN 0207284 03

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AOD+CC, NO WELD REPAIR, MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Date: 3/16/2015 Page: 1

Steel: 303

Finish: CD

Corrosion:

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BG6692 1		1.7500		1.309	144.00	4	1	

BG6692 1

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
N8R6	US	.0457	.1385	17.0905	.3655	1.6825	.2510	.0453	8.2985	.0310

S % .3200
SI % .2580

MECHANICAL PROPERTIES

Product Id	ID	HB	2YS	UTS	RA	ELNG
	o i	No.	KSI	KSI	%	% 4D
BG6692 1	R L	198.0	74.90	97.53	22.11	20.18

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr.

ASB

THYSSENKRUPP MATERIALS NA

PO/Ref 28026

DART AEROSPACE
STAINLESS STEEL ROUND BAR 304L
1.00" DIA X 144.0000"
PART NO.

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results
BL PEC-928193-005
8 April 5
Pg 1/1



METALLURGICAL TEST REPORT

740 Imperial Road North

Certificate: 3286 5 Mail To: THYSSENKRUPP MATERIALS

Customer: 007206 001 2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Ship To: THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Date: 11/06/2014 Page: 1

Steel: 304/304L

Finish: CD

Corrosion: ASTM A262-10 Prac A/E OK

Red Ratio: 69.4 : 1

Your Order: PEC260290

NAS Order: PN 0042722 13

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30400/30403 EN 10204 3.1, ASTM A484/13a
ASTM A276/13, ASTM A479/13a, ASTM A382/13 CHEM ONLY,
ASME SA479/13, ASME SA182/10 CHEM ONLY
AMS 5639H, AMS 5647J, AMS QQS-763B, QQS-763F, ASTM F899/11
SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8
ASTM A193/10A-ASME SA193/10 CL 1 GR B8

REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AOD+CC. NO WELD REPAIR. MELTED AND NEG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product ID	Shield #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BG4268 4		1.0000		1.236	144.00	11	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
M8B5	US	.0149	.1530	18.0480	.4365	1.3480	.3115	.0750	8.5010	.0320

S %	SI %
.0225	.2230

MECHANICAL PROPERTIES

Product ID	1 d o i c z	HB KO.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BG4268 4	R L	215.0	79.60	101.73	69.90	43.47

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

ASB

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.375" x 1.00" X 144.0000"
PART NO.

PO/Ref 28026

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-007

8Apr15

Pg 1/2

Signed by: *[Signature]*

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-265267-1		CUSTOMER PART NUMBER: 390/STK		PRODUCT DESCRIPTION: .375 X 1.000 SC RECT BAR	
KAISER ORDER NUMBER: 682528	LINE ITEM: 001	SHIP DATE: 02/27/2015	KAISER LOT NUMBER: Z00243056	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 508.000 LB	QUANTITY: 96.000 PCS	B/L NUMBER: 611184	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00243056	0001	1	42.5	38.8	14.7	RE 92	N/A	N/A
Z00243056	0001	2	42.0	38.3	13.2	RE 91	N/A	N/A
Z00243056	0001	3	42.5	38.9	15.3	RE 92	N/A	N/A
Z00243056	0001	4	43.5	40.1	16.0	RE 93	N/A	N/A
Z00243056	0001	5	43.0	39.5	14.7	RE 93	N/A	N/A
Z00243056	0001	6	42.8	39.2	14.5	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
104609	.63	.28	.24	.07	.85	.07	.02	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 97(REF 2012) UNS4A96061
(T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

Plant Serial: 00166782
Kaiser Order Number: 682528
Line Item: 001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.375" x 1.00" X 144.0000"
PART NO.

PO/Rel 28026

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-007

8Apr15

Pg 2/2

Signed by: *[Signature]*

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PART NUMBER		CUSTOMER PART NUMBER		PRODUCT SPECIFICATIONS	
PEC-264718-2		501/STK		KAISER SELECT PRECISION ROD 750 14-004	
Kaiser Aluminum Fabricated Products, LLC		SHIP DATE		ORDER NUMBER	
5205 KAISER DRIVE		02/24/2015		165119	
KALAMAZOO, MI 49048		SA NUMBER		165119	
1034.000 LB		011182		12.500 FT	
105 000 PCS					
THYSSENKRUPP CANADA		THYSSENKRUPP CANADA		THYSSENKRUPP CANADA	
2821 LANGSTAFF ROAD		2821 LANGSTAFF ROAD		2821 LANGSTAFF ROAD	
CONCORD, ON L4K 5C3 CANADA		CONCORD, ON L4K 5C3 CANADA		CONCORD, ON L4K 5C3 CANADA	

Actual Physical Properties

REFERENCE	DART	SAMPLE#	UTS (KSI)	YIELD (KSI)	ELONG	REDUCED	EXPAND	TEMP
40453-204	0001	3	52.1	48.9	15.0	28	32	17.5
40453-204	0001	10	52.3	47.8	15.0	28	32	17.5
40453-204	0001	11	52.2	48.9	15.0	28	32	17.5
40453-204	0001	2	52.7	48.7	15.0	28	32	17.5
40453-204	0001	3	52.1	48.7	15.0	28	32	17.5
40453-204	0001	4	51.4	47.8	15.0	28	32	17.5
40453-204	0001	5	51.4	47.8	15.0	28	32	17.5
40453-204	0001	6	51.8	48.2	15.0	28	32	17.5
40453-204	0001	7	52.0	48.5	15.0	28	32	17.5
40453-204	0001	8	51.4	47.7	15.0	28	32	17.5
40453-204	0001	9	52.1	48.1	15.0	28	32	17.5

Plant Serial: 00166782

Kaiser Order Number: 682528

Line Item: 001

Chemical Composition Aluminum Remainder

CDN175	Si	Fe	Cu	Mn	Mg	Cr	Zn	Pb	Bi	In	Sb	Tot
0.0015	0.50	0.70	0.40	0.15	0.20	0.35	0.25	0.15	NA	NA	NA	0.05

Doc No. 205067 Indexed 5Mar15 by slssup1

Applicable Requirements:

PER ASTM-B221-14, STENCILED ASME-SB221 1998 SECT II PER AMS-QQ-A-200/8 (REAF 2012)
UNS# A96061 MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM
MECHANICAL PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION
= 10.0% MIN

THYSSENKRUPP MATERIALS NA

PO/Ref 28026

DART AEROSPACE
STAINLESS STEEL ROUND BAR 303 STAINLESS
.625" DIA X 144.0000"
PART NO.

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: *[Signature]*

Certificate of Mill Test Results
8Apr15
BL PEC-928193-002

Pg 1/1



METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

740 Imperial Road North

Certificate: 45396 5 Mail To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Ship To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Date: 3/30/2015 Page: 1

Steel: 303

Finish: CD

Corrosion:

Your Order: PEC265973

NAS Order: IN 0208224 01

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
ASTM A582/12 EN 10204 3.1, ASTM A484/11
AMS 56469 TYPE 1, Q05-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DEPAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AOD+CC. NO WELD REPAIR, MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Std #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BH0013 6		.6250		520	144.00	1	1	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Span) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	NI %	MO %	N %	NI %	P %
74H5	US	.0421	.1845	17.1405	.3785	1.7905	.2810	.0481	8.3375	.0340

S %	SI %
.3405	.4605

MECHANICAL PROPERTIES

Product Id	Id	HB	.2YS	UTS	RA	Elng
	o i	No.	KSI	KSI	%	% 4D
BH0013 6	R L	225.0	96.00	110.00	34.00	27.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr.

[Signature]

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304-2B
0.0300 Nom X 48.0000" X 96.0000"
PART NO.

PO/Rd 28026

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

[Signature]

Certificate of Mill Test Results
BL PEC-928193-006

8Apr15
Pg 1/2



運錫鋼鐵股份有限公司
YUEN CHANG STAINLESS STEEL CO., LTD.

檢驗證明書

MILL TEST CERTIFICATE(S)

列印日期 ISSUE DATE: 2014/08/20

臺灣市板橋區中正路235號13F
13F, No. 235 Jungcheng 4th Road, Chunglin
Chiueh, Keelung, Taiwan
TEL: 886-7-9695858 FAX: 886-7-9385168
http://www.yuenchang.com.tw

客戶名稱 Customer: Thyssenkrupp Steel Services
A Division of Thyssenkrupp Materials NA Inc 22365 West Eleven Mile Road Southfield, MI 48033 USA

商品描述 Desc.: Prime, Cold Rolled Stainless Steel Sheets, Slitted Edge, As Per ASTM A240/A480 in Grade 304, 2B Finish
Of Goods Prime, Cold Rolled Stainless Steel Sheets, Slitted Edge, As Per ASTM A240/A480 in Grade 304, No.1 Finish

項目 Item	鋼卷編號 Coil No.	爐號 Heat Number(s)	鋼種 Steel Grade	表面 Finish	厚度 Thickness	產品尺寸 (Inches) Width x Length	淨重 Net Weight (KGS)
AA001	HKA40392060A20M-07	A2401054	304	2B	0.120 x 48 x 96	2,399	✓
AA002	HKA4039220A20-12	A2401053	304	2B	0.060 x 48 x 96	2,327	✓
AA003	FA40302560Q20-34	A2400918	304	2B	0.030 x 48 x 96	2,273	✓
AA006	M7604-21	A0535-1030	304	2B	0.048 x 48 x 96	2,327	✓
AA004	HKA40614470A00-16	A1402469	304	NO.4	0.060 x 48 x 120	2,342	✓
AA005	HKA40314470A00-21	A1402469	304	NO.4	0.060 x 48 x 96	2,331	✓
AA007	9D849007-15	9D849	304	NO.4	0.048 x 48 x 120	2,351	✓
AA008	HKA40390610C10-36	A0400804	304	NO.4	0.048 x 48 x 96	765	✓

化學成分 Chemical Analysis (%)

Item	C	Si	Mn	P	S	Cr	Ni	N	Cu	Mo	Others	T.S N/MM2	Y.S(0.2%) N/MM2	Flong (%)	HB	HRB	HV
AA001	0.048	0.525	1.146	0.035	0.0010	18.107	8.010	0.043				686	264	57.0		86.0	
AA002	0.048	0.436	1.224	0.035	0.0010	18.149	8.024	0.046				712	315	55.0		85.5	
AA003	0.050	0.440	1.200	0.036	0.0010	18.100	8.000	0.040	0.026			665	259	57.5		84.5	
AA006	0.042	0.440	1.040	0.035	0.0030	18.140	8.070	0.060				647	310	49.9		84.7	
AA004	0.048	0.396	1.230	0.042	0.0011	18.010	8.034	0.041				692	295	56.0		81.0	
AA005	0.048	0.396	1.230	0.042	0.0011	18.010	8.034	0.041				692	295	56.0		81.0	
AA007	0.020	0.650	1.550	0.038	0.0010	18.100	8.000	0.040				669	247	55.1		164.0	
AA008	0.044	0.400	1.093	0.038	0.0010	18.165	8.010	0.054				670	279	56.0		84.0	

機械性質 Mechanical Properties

註: 本廠所製產品, 均按材料規格製造及試驗, 並符合規格之要求。
We hereby certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirements of the applicable specification.
本產品無雜質污染, 並且不含汞。The material listed above is free from radiation contamination and mercury.
本證明書符合EN10204/Type 3.1規格。Inspection certificate in accordance with EN10204/Type 3.1.
We hereby Certifying The Material To ASTM A240/A480 As Per EN10204/ 3.1

YUEN CHANG STAINLESS CO., LTD.
for and on behalf of
YUEN CHANG STAINLESS CO., LTD.
Authorized Signatures
JACKY CHANG
Manager

THYSSENKRUPP MATERIALS NA

PO/Rel 28026

DART AEROSPACE
STAINLESS STEEL SHEET 304-2B
.0300 Nom X 48.0000" X 96.0000"
PART NO.

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results

BL PEC-928193-006

8 Apr 15
Pg 2/2



鋼鐵紙股份有限公司
YUEN CHANG STAINLESS STEEL CO., LTD.

檢驗證明書

MILL TEST CERTIFICATE(S)

列印日期: 2014/06/20

高雄市中區中正路235號13F
13F, No. 235 Jungliang 4th Road, Chienjin
Chiu, Kaohsiung, Taiwan
TEL: 886-7-9655858 FAX: 886-7-9685768
http://www.yuenchang.com.tw

客戶名稱: ThyssenKrupp Steel Services
Customer: A Division of ThyssenKrupp Materials NA Inc 22355 West Eleven Mile Road Southfield, MI 48033 USA

商品描述: Description Of Goods And/Or Services:
Desc: Prime, Cold Rolled Stainless Steel Sheets, Sifted Edge, As Per ASTM A240/A430 In Grade 304, 2B Finish
Of Goods: Prime, Cold Rolled Stainless Steel Sheets, Sifted Edge, As Per ASTM A240/A430 In Grade 304, No.4 Finish

項目 Item	鋼花編號 Coil No.	爐號 Heat Number(S)	鋼種 Steel Grade	表面 Finish	產品尺寸 (Inches) Thickness x Width x Length	淨重 Net Weight (KGS)											
AA008	9D849007-3	9D849	304	NO.4	0.048 x 48 x 96	1,609											
CITICORP FINANCIAL SERVICES LTD																	
6816717550																	
KUALA LUMPUR																	
化學成分 Chemical Analysis (%)																	
Item	C	Si	Mn	P	S	Cr	Ni	N	Cu	Mo	Others	T.S N/MM2	Y.S(0.2%) N/MM2	Elong (%)	H3	HRB	HV
AA008	0.020	0.650	1.550	0.038	0.0010	18.100	8.000	0.040				669	247	55.1			164.0

茲證明本表所列產品，均依材料規格製造及檢驗，並符合規格之要求。
We hereby certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirement of the above material specification.

本產品無磁粉污染，並且不含有：The material described above is free from radiation contamination and mercury.
本證明書符合EN10204/Type 3.1列印。 Inspection certificate in accordance with EN10204/Type 3.1.

We Hereby Certifying The Material To ASTM A240/ A430 As Per EN10204/ 3.1

ThyssenKrupp Materials NA PO PEC-268580

QC Manager
J. Chiu
YUEN CHANG STAINLESS STEEL CO., LTD.
Authorized Signatures

THYSSENKRUPP MATERIALS NA

PO/Rel(28026

PART AEROSPACE
ALUMINUM ROUND BAR 6061-T6511
.625" DIA X 144.0000"
PART NO.

Certificate of Mill Test Results
BL PEC-928193-009
8 Apr 15
Pg 1/1

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:



Service Center Metals

5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

Can Do.

BILL TO	MANIFEST NUMBER	DIE NUMBER	DATE OF SHIPMENT
ThyssenKrupp Materials NA	247886	RD0002	1/8/2015
SHIP TO	CUSTOMER PO	ALLOY/ZEMER	SALESPERSON
ThyssenKrupp Materials NA, Toronto	PEC-263550	6061-T6511	David Schroeder
Quantity Certified	CUSTOMER PART NUMBER	DESCRIPTION	
1,077 lbs 248 pcs	RD0002	Lightning Rod Tile 0.625 + .004/- .003	

OUR ORDER NUMBER	ITEM
221880	1

CERTIFICATION
ASTM-B221-13 No Stencil
SPECIFICATION
AMS-QQA-2008 - 1997

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
5	201424620	1/4/15	min 48.80 max 49.90	min 46.10 max 47.50	min 18.42 max 19.76

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each Total	Melt Source:
11241407	6061	0.77	0.37	0.31	0.14	0.85	0.15	0.08	0.02	97.33	0.05 0.15	United States of America

Print Date: 1/8/2015

Calvin J. Wladis, Director of Quality & Technical Services

Rev 8/23/11 UNS

Jm 5-4-19

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 304L
50" DIA X 144.0000"
PART NO.

PO/Ref 28026

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-004

8 April 15

Signed by:

Pg 1/1

VIRAJ PROFILES LIMITED

VIRAJ

Regd & Mkt off: G-33 & 34, MIDC, Industrial Area, Tarapur, Thane (Dist), Maharashtra, INDIA - 401506, E-Mail: sales@viraj.com
Works: SURVEY No- 114, 119 & 120, VILL. Mahagaon, Tal: Palgar, Dist: Thane-401501, MAHARASTRA, INDIA, viciqc@viraj.com

TEST CERTIFICATE

CUSTOMER	ORDER NO	PACKING LIST NO	INSPECTION NO	DATE
FIDELITY PAC METALS LTD. 1303 North Service Rd East, Unit 1, Oakville ON L6H 1A7 CANADA	P03383	51/977795/8	100004289970	14.09.2014
			GRADE 304/304L	HEAT No 34643

BUNDLE NO :
1100227976, 1100227977.

DESCRIPTION

STAINLESS STEEL BRIGHT BARS

COLD DRAWN POLISHED - 2H

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
1/2"	ROUND	ASTM A484	12' - 14'	256	2,072.000 LB

CHEMICAL ANALYSIS

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0190	0.960	0.390	0.0280	0.0370	18.030	8.070	0.540	0.500	0.140	0.07600

TEST RESULTS

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	Reduction Of Area %	Hardness BHN	Grain Size NOS
90.0	106.0	42.0	70.0	216.0	7.0

SPECIFICATION:

MATERIAL CONFIRMS TO DIN EN 10088-3:2005:WNR 1.4301/1.4307, EN 10222-5 AND EN 10272 COND-A & ASTM A182/A-182M-13, A276-13 COND A, A479/A479M-13 COND A, A193/A193M-11a B8 CL-1, A320/A320M-11a B8 CL-1, A484 11, A388/A388M-05, ASME SA182-11, SA479-04, SA-193-11 B8 CL-1, SA320-04 B8 CL-1, ASTM A314-2008. KGC SATISFACTORY AS PER ASTM A 262-10 PRACTICE E. AMS 5639H /AMS5647H (EXCEPT MARKING), QQ-S-763F, NACE MR0103, NACE-MR0175-2003, SAF-AMS-S-7720A, MIL-S-862-B, AISI 304/304L & UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1.

REMARKS

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO: FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO: GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED. MELT SOURCE: AOD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

WORKS INSPECTOR
K R K MURTHY

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLT BAR ECONOPLT 6061-T6511
 .750" X 8.00" X 96.0000"
 PART NO.

PO/Rel 28026

We certify that this is a true copy of the report
 furnished by the producer of the metal, or data
 resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-008

8Apr15

Pg 1/1

Signed by: *[Signature]*

KAISER
ALUMINUM
 FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
 FABRICATED PRODUCTS, LLC
 5205 KAISER DRIVE
 KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-265999-3		CUSTOMER PART NUMBER: W66/STK		PRODUCT DESCRIPTION: .750 X 8.000 PRECISION WIDE BAR	
KAISER ORDER NUMBER: 684324	LINE ITEM: 003	SHIP DATE: 04/02/2015	KAISER LOT NUMBER: Z00102083	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 2032.000 LB	QUANTITY: 24.000 PCS	B/L NUMBER: 611519	DIAM/DIA/T/KNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00102083	0001	1	42.6	39.9	12.0	RE 90	N/A	N/A
Z00102083	0001	2	42.6	39.9	12.0	RE 90	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
104048	.58	.23	.19	.07	.84	.05	.02	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 97 (REAF 2012) UNS#A96061
 (T6511 also conforms to T6 not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
 MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
 OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
 inspected and tested and found in conformance with applicable specifications forming a part of the
 description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
 Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

Aimee L. Macnowski

Plant Serial: 00171092

Kaiser Order Number: 684324

Line Item: 003

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM PLATE 7075-T651
4.00" THICK X 3.0000" X 48.0000"
PART NO.

PO/Ref 28026

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-013

8Apr15

Pg 1/2

Signed by: 

Aleris Aluminum (Zhenjiang) Co., Ltd
No.1 Caijia Road, Jingkou Industrial Park, Zhenjiang, Jiangsu
212141, China



INSPECTION CERTIFICATE (EN 10204/3.1)

Page 1 / 2

Certificate No. : 2014050376
Customer : THYSSENKRUPP MATERIALS NA
THYSSENKRUPP MATERIALS NA, TORONTO, 2821 LANGSTAFF
ROAD, CONCORD, ONTARIO L4K 5C6, CA
Purchase Order No. : PEC-258564
Alloy : 7075 Temper : T651
Batch No. : 1350002250 Quantity : 2
Dimensions : 4.000x48.50x144.50 inch
Master standard : ASTM B 209, 2010

TECHNOLOGICAL PROPERTIES

Mechanical properties: Temper: T651
ASTM B 209: 2010

	PI-No.	Spec.No.	Rp1.0	Rp0.2 ksi	Rm ksi	A2" %	Z	Rp/Rm
LT Min	-	-	-	54.1	67.0	3.0	-	-
Max	-	-	-	-	-	-	-	-
Act	1	1	-	57.7	72.4	12.3	-	-
Act	1	2	-	57.7	72.4	12.4	-	-
Act	1	3	-	59.0	73.2	12.3	-	-

Chemical Composition in %, Remainder Al

Alloy : 7075 Cast No. : ZJ77501-1-13-0114-6

Alloy Spec. : ASTM B 209: 2010

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others each	Others total
Min	0.00	0.00	1.20	0.00	2.10	0.18	5.10	0.00	0.00	0.00
Max	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.15
Act	0.067	0.181	1.502	0.017	2.626	0.197	5.649	0.0326	0.0163	0.0434

Other tests

DIMENSIONAL CONTROL: OK

SURFACE CONTROL: OK

MANUFACTURED IN THE PEOPLE'S REPUBLIC OF CHINA.

CERTIFIED THAT THE WHOLE OF THE SUPPLIES DETAILED HEREON HAVE BEEN INSPECTED, TESTED AND,
UNLESS OTHERWISE STATED ABOVE, CONFORM IN ALL RESPECTS WITH THE REQUIREMENTS OF THE
SPECIFICATION, CONTRACT OR ORDER. WE CONFIRM, THAT QUALITY SYSTEM OF ALERIS ALUMINUM
(ZHENJIANG) CO., LTD. IS IN ACCORDANCE WITH ISO 9001 IN THE RELEVANT VALID VERSION AND
CERTIFICATED BY AN ACCREDITED 3RD PARTY.

Valid quality management system approvals see: www.aleris.com
QA-CE-02B

Page 1 / 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM PLATE 7075-T651
4.00" THICK X 3.0000" X 48.0000"
PART NO.

PO/Rel 28026

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-928193-013

8Apr15

Signed by: 

Pg 2/2

Aleris Aluminum (Zhenjiang) Co., Ltd
No.1 Caijia Road, Jingkou Industrial Park, Zhenjiang, Jiangsu
212141, China



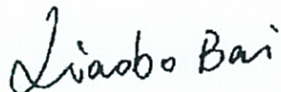
INSPECTION CERTIFICATE (EN 10204/3.1)

Page 2 / 2

Certificate No.	: 2014050376		
Customer	: THYSSENKRUPP MATERIALS NA		
	THYSSENKRUPP MATERIALS NA, TORONTO, 2821 LANGSTAFF		
	ROAD, CONCORD, ONTARIO L4K 5C6, CA		
Purchase Order No.	: PEC-258564		
Alloy	: 7075	Temper	: T651
Batch No.	: 1350002250	Quantity	: 2
Dimensions	: 4.000x48.50x144.50 inch		
Master standard	: ASTM B 209: 2010		

Quality Assurance, 2014.05.28

Valid after signature



Xiaobo Bai

Valid quality management system approvals see: www.aleris.com
QA-CE-02B

Page 2 / 2



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 1 of 8

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

905 669 9444

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M303R0.500	303 Round Bar 0.500"	4/15/2015 Yes 4/15/2015		36.00 f	\$1.65	\$59.40
MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582							
NOTE: AISI 304/316 NOT ACCEPTABLE							
Line Total:							\$59.40
2	M303R0.625	303 Round Bar 0.625"	4/15/2015 Yes 4/15/2015		12.00 f	\$3.25	\$39.00
MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582							
NOTE: AISI 304/316 NOT ACCEPTABLE							
Line Total:							\$39.00

SP15-04-10

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 2 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

3	M303R0.750	303 Round Bar 0.750	4/15/2015	48.00	\$3.51	\$168.48
			Yes	f		
			4/15/2015			

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

Line Total: \$168.48

4	M304B0.500X2.500	304 BAR .500 x 2.50	4/15/2015	12.00	\$18.06	\$216.75
			Yes	f		
			4/15/2015			

MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
AS PER ASTM A276 OR ASTM A240

see e-mail from Chris P, A 479 acceptable.
NOTE: AISI 303 NOT ACCEPTABLE

Line Total: \$216.75

5	M304B0.625X3.000	304 BAR .625 X 3.00	4/15/2015	12.00	\$25.35	\$304.15
			Yes	f		
			4/15/2015			

MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
AS PER ASTM A276 OR ASTM A240

NOTE: AISI 303 NOT ACCEPTABLE

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 3 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: \$304.15

6 M304R.500 304 SS roundbar .500 4/15/2015
Yes
4/15/2015

24.00 ✓
f

\$2.17 ✓ \$52.00

MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276

(NOTE: AISI 303 NOT ACCEPTABLE)

Line Total: \$52.00

7 M304R1.000 304 round bar 1.00 4/15/2015
Yes
4/15/2015

12.00 ✓
f

\$6.27 ✓ \$75.20

MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276

(NOTE: AISI 303 NOT ACCEPTABLE)

Line Total: \$75.20

285-04-10

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 4 of 8

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

8	M304S22GA	304/316 .032 Sheet	4/15/2015	64.00	✓	\$3.19	\$204.00
			Yes	sf			
			4/15/2015				

MATERIAL: AISI 304/316 SS SHEET ANNEALED
AS PER MIL-S-5059 OR AMS 5513 (304)
OR AMS 5524 (316) OR ASTM A240 OR
ASME SA240

Line Total: \$204.00

9	M6061T6B0.375X01.000	6061T6 BAR .375 x 1.00	4/15/2015	12.00	✓	\$2.92	\$35.00
			Yes	f			
			4/15/2015				

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$35.00

10	M6061T6B0.750X08.000	6061-T6 BAR .750" X 8.00"	4/15/2015	8.00	✓	\$26.25	\$210.00
			Yes	f			
			4/15/2015				

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 5 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

				Line Total:	\$210.00
11	M6061T6R0.625	6061-T6 Round Bar .625"	4/15/2015	36.00 ✓	\$36.18
		Yes		f	
		4/15/2015			

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$36.18

12	M6061T6R0.750	6061-T6 Round Bar .750"	4/15/2015	48.00 ✓	\$68.90
		Yes		f	
		4/15/2015			

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$68.90

2015-04-13

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER
Purchase Order ID PO28026

Purchase Order Date 4/6/2015
PO Print Date 4/6/2015

Page Number 6 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

13 M6061T6S.040 6061-T6 .040 Sheet 4/17/2015
Yes
4/17/2015

192.00
sf

\$2.06

\$396.00

MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER
QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
OR ASTM B209

Line Total:

\$396.00

14 M6061T6S.080 6061-T6 .080 Sheet 4/17/2015
Yes
4/17/2015

144.00
sf

\$4.13

\$594.00

MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER
QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
OR ASTM B209

200-1976.00 SF

Line Total:

\$594.00

15 M7075T6B1.250X1.000 7075-T6 Bar 1.250" X
1.000" 4/15/2015
Yes
4/15/2015

24.00

\$9.15

\$219.71

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 7 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444
Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: \$219.71

16 M7075T6B1.750X02.250 7075-T6 BAR 1.750" X 4/15/2015 9.00 \$26.28 \$236.50
2.250"

Yes f
4/15/2015

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total: \$236.50

17 M7075T6B3.000x04.000 7075-T6 BAR 3.000" X 4/15/2015 4.00 \$81.56 \$326.24
4.000" Grain along 3"

Yes f
4/15/2015

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

*****NOTE: GRAIN DIRECTION ALONG 3" DIA.*****

895-04-13

Line Total: \$326.24

Note:

4/6/2015



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO28026**

Purchase Order Date 4/6/2015

PO Print Date 4/6/2015

Page Number 8 of 8

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

18 71401-45 PROCUREMENT 4/15/2015 1.00 \$0.00 \$0.00
QUALITY CLAUSES

No

4/15/2015

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality document

6015-01-13

Line Total: \$0.00

PO Total: \$3,241.51

CZU

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 4/6/2015

Chantal Lavoie

From: Chris Provencal
Sent: Tuesday, April 07, 2015 3:59 PM
To: Chantal Lavoie
Cc: David Shepherd
Subject: RE: dart

Chantal,

ASTM A 479 is acceptable for 304 bar. ASTM A 479 is for bar and shapes suitable for pressure vessels. It is therefore superior to ASTM A276 (on dwg), which is for standard bar.

We should flag this order to ensure it gets deviated when received. If we plan on ordering a lot of this material, we can update the dwg to add the spec.

Chris

From: Chantal Lavoie
Sent: Tuesday, April 07, 2015 1:40 PM
To: Chris Provencal
Subject: FW: dart

Hi Chris,
Would you know if ASTM A 479 is acceptable for 304 bar.
Thanks
Chantal

From: Ivers, Stan [<mailto:Stan.Ivers@thyssenkrupp.com>]
Sent: Monday, April 06, 2015 3:12 PM
To: Chantal Lavoie
Cc: Ivers, Stan
Subject: RE: dart

Hi Chantal

Item 4 and 5 ASTM A 479 flat bar ??? 304/304L please advise

Regards

Stan Ivers
Inside Sales Rep
ThyssenKrupp material NA
905-532-1350
stan.ivers@thyssenkrupp.com
www.tkmna.com

We Stock Stainless!

Round Bar - Tube - Angle